## ABSTRACT

The present invention provides a transmission mechanism with a caseless differential mechanism for an automotive vehicle to drive four wheels instead of two differential mechanisms of the prior art disposed on the front axle and rear axle. The transmission mechanism of the invention is of a compact structure and a relatively less cost of manufacturing, and makes a clearance between the chassis of the automotive vehicle and the ground increased. The performance of the automotive vehicle equipped with the transmission mechanism of the invention can be improved.